IN THE CLAIMS

Please amend the claims as follows:

1. (Currently amended) A method for providing continuation passing in ~~operating~~ a virtual machine having a stack memory, comprising: ~~to provide continuation passing in a wireless device, wherein the virtual machine comprises a stack memory, and the method comprises:~~

encountering a context-creating trigger;

responsive to said encountering of said context-creating trigger:

constructing a continuation block, said continuation block comprising a block header and a stack fragment, said stack fragment comprising a range of said stack memory between a current stack top address and a current stack base address; and ~~in response to the trigger, wherein the continuation block comprises a stack fragment derived from the stack memory;~~

pushing said continuation block onto said stack memory;

encountering an evaluation instruction; and

responsive to said encountering of said evaluation instruction:

popping said continuation block from said stack memory;

pushing said stack fragment portion of said continuation block onto said stack memory;

setting said current stack top address to a start of said stack fragment of said stack memory; and

setting said current stack base to a end of said stack fragment of said stack memory.

~~storing the stack fragment from the continuation block on the stack memory in response to the evaluation instruction.~~

2. (Original) The method of claim 1, wherein the context-creating trigger comprises a selected program instruction.

3. (Original) The method of claim 1, wherein the context-creating trigger comprises a program marker associated with a program instruction.

4. (Canceled)

5. (Original) The method of claim 1, further comprising jumping to selected program code to evaluate the continuation.

6. (Currently amended) A virtual machine for use in a wireless device having an embedded processor, the virtual machine comprising:

a stack memory that comprises logic to push and pop ~~store and retrieve~~ information;

a logic to encounter a context-creating trigger;

a logic for responding to an encounter with said context-creating trigger by:

constructing ~~to construct~~ a continuation block, said ~~in response to the trigger, wherein the~~ continuation block ~~comprises~~ comprising a block header and a stack fragment, said stack fragment comprising a range of said stack memory between a current stack top address and a current stack base address; and ~~derived from the stack memory;~~

pushing said continuation block onto said stack memory;

a logic to encounter an evaluation instruction; and

a logic for responding to an encounter with said evaluation instruction by:

popping said continuation block from said stack memory;

pushing said stack fragment portion of said continuation block onto said stack memory;

setting said current stack top to a start of said stack fragment; and

setting said current stack base to an end of said stack fragment. ~~to store the stack fragment from the continuation block on the stack memory in response to the evaluation instruction.~~

7. (Original) The virtual machine of claim 6, wherein the context-creating trigger comprises a context evaluation instruction.

8. (Original) The virtual machine of claim 6, wherein the context-creating trigger comprises a program marker associated with a program instruction.

9. (Canceled)

10. (Original) The virtual machine of claim 6, further comprising logic to jump to selected program code to evaluate the continuation.

11. (Currently amended) A computer readable media tangibly storing ~~comprising program~~ instructions that when executed by processing logic provides a virtual machine having a stack memory [[VM]] that performs continuation passing, said instructions comprising: ~~wherein the virtual machine comprises a stack memory, and the computer readable media comprises:~~

~~program~~ instructions for encountering a context-creating trigger;

~~program~~ instructions for responding to an encounter with said context-creating trigger by:

constructing a continuation block, said continuation block comprising a block header and ~~in response to the trigger, wherein the continuation block comprises~~ a stack fragment comprising a range of said stack memory between a current stack top address and a current stack base address; and ~~derived from the stack memory;~~

pushing said continuation block onto said stack memory;

~~program~~ instructions for encountering an evaluation instruction; and

~~program~~ instructions for responding to an encounter with said evaluation instruction by:

popping said continuation block from said stack memory;

pushing said stack fragment portion of said continuation block onto said stack memory;

setting said current stack top to a start of said stack fragment; and

setting said current stack base to an end of said stack fragment. ~~storing the stack fragment from the continuation block on the stack memory in response to the evaluation instruction.~~

12. (Currently amended) A virtual machine ~~for use in a wireless device having an embedded processor, the virtual machine~~ comprising:

~~means for providing~~ a stack memory means;

a means for encountering a context-creating trigger;

a means for responding to an encounter with said context-creating trigger by:

constructing a continuation block, said continuation block comprising a block header and a stack fragment, said stack fragment comprising a range of said steak memory means between a current stack top address and a current stack base address; and ~~in response to the trigger, wherein the continuation block comprises a stack fragment derived from the stack memory;~~

pushing said continuation block onto said stack memory;

a means for encountering an evaluation instruction; and

a means for responding to an encounter with said evaluation instruction, comprising:

a means for popping said continuation block from said stack memory;

a means for pushing said stack fragment portion of said continuation block onto said stack memory;

a means for setting said current stack top to a start of said stack fragment; and

a means for setting said current stack base to an end of said stack fragment. ~~storing the stack fragment from the continuation block on the stack memory in response to the evaluation instruction.~~

13. (Canceled)

14. (Original) The virtual machine of claim 12, further comprising means for jumping to selected program code to evaluate the continuation.

15. (Currently amended) A wireless device having an embedded processor, the wireless device comprising:

a stack memory that comprises logic to push and pop ~~store and retrieve~~ information; and

a virtual machine that operates to perform continuation passing, the virtual machine comprising:

a logic to encounter a context-creating trigger;

a logic for responding to an encounter with said context-creating trigger by:

constructing ~~to construct~~ a continuation block, said continuation block comprising a block header and a stack fragment, said stack fragment comprising a range of said stack memory between a current stack top address and a current stack base address; and ~~in response to the trigger, wherein the continuation block comprises a stack fragment derived from the stack memory;~~

pushing said continuation block onto said memory;

a logic to encounter an evaluation instruction; and

a logic for responding to an encounter with said evaluation instruction by:

popping said continuation block from said stack memory;

pushing a stack fragment portion of said continuation block onto said stack memory;

setting said current stack top to a start of said stack fragment; and

setting said current stack base to an end of said stack fragment. ~~to store the stack fragment from the continuation block on the stack memory in response to the evaluation instruction.~~